

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-9, 11-13, and 15-19 remain pending in the present Application. Claims 1, 12 and 16 have been amended. Support for the amendment of Claims 1, 12 and 16 can be found at least in FIG. 12 and on page 21, lines 1-12 of the specification. No new matter has been added.

By way of summary, the Official Action presents the following issue: Claims 1-9, 11-13, and 15-19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Marturano et al. (U.S. Patent No. 5,636,230, hereinafter Marturano) in view of Kumar (U.S. Patent No. 6,269,080).

REJECTION UNDER 35 U.S.C. § 103

The outstanding Official Action has rejected Claims 1-9, 11-13, and 15-19 under 35 U.S.C. § 103 as being anticipated by Marturano in view of Kumar. The Official Action contends that Marturano et al. describes all the Applicants' claim features with the exception of determining by an information delivery apparatus, in accordance with a given standard without receiving a request for retransmission, that at least one radio terminal is predetermined, prior to transmission of a multicast information to the radio stations, as being the retransmission-permitted terminal permitted for retransmission of the multicast information. However, the Official Action recites Kumar as describing this more detailed aspect of the Applicants' invention, and states that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to combine the cited references for arriving at the Applicants' claims. Applicants respectfully traverse the rejection.

Applicants' amended Claim 1 recites, *inter alia*, a retransmission control method in a multicast service providing system in which an information delivery apparatus transmits multicast information to radio terminals within a service area of the information delivery apparatus via a radio section. Some of the radio terminals of the service area are configured to send a request for retransmission of multicast information in case of an error, while others of the radio terminals are configured not to send a request for retransmission. The method including:

. . . (c) changing one of the radio terminals designated as being the retransmission-permitted terminal, to a retransmission-inhibited terminal which is not permitted for retransmission of the multicast information, and changing another of the radio terminals within the service area to a retransmission-permitted terminal based on a status of retransmission requests received from the radio terminals, such that correlation between reception errors occurring at the originally designated retransmission-permitted terminal and reception errors occurring at the newly changed retransmission-permitted terminal is reduced by said changing of said one of the originally designated radio terminals to the retransmission-inhibited terminal and said changing of said another of the radio terminals to the retransmission-permitted terminal.

Kumar describes an active receiver selection process, in which the FDSP server selects, in response to a token request message received from a number of FDSP clients, the first FDSP client that responds as the active receiver. (See e.g. step S05 in Fig. 5 of Kumar). For example, the FDSP server multicasts in step 501 an open token message directed to a subset of FDSP clients.¹ After all the FDSP clients receive the open token message, and respond with a token request message in step 502, the FDSP server in step S503 selects, in response to the token request messages received from the FDSP clients, the first responding FDSP client as being the active receiver.²

¹ See Kumar at Figure 5.

² Kumar at Figure 5, steps 501-503.

As can be appreciated, the cited portions of Kumar merely describe a file distribution process including an active receiver selection process where the server selects one of the clients as the active receiver.

According to the Applicants' claimed advancement (Claims 1, 12 and 16), the information delivery apparatus determines, in accordance with a given standard without receiving a message or a request for retransmission from the radio terminals by the information delivery apparatus, that at least one of the radio terminals is predetermined as being the retransmission-permitted terminal. Specifically, the Applicants' information delivery apparatus (base station) determines, without receiving a NACK from the radio terminals by the information delivery apparatus and in accordance with a given standard (e.g., any of the five determinations: Figure 7-11, 12 and 14), that some of the radio terminals (mobile stations) are predetermined as being the retransmission-permitted terminals.

For example, as shown in exemplary part (a) of Figures 12 and 13 of the Applicants' specification, each of the mobile stations A and B requests retransmission of the identical packets of SN=3, SN=7, and SN=8. In this case, the mobile station F is placed in the retransmission control instead of the mobile station A, as shown in part (b) of Figure 12 (namely, in the information delivery apparatus of the Applicant's claimed advancement, the mobile station A is changed to a retransmission-inhibited terminal while the mobile station F is newly set to a retransmission-permitted terminal). The mobile station F is selected such that correlation between reception errors occurring at the mobile station F and reception errors occurring at the mobile station A are reduced. Then, the base station notifies the mobile station A that it has been placed out of retransmission control (retransmission-

inhibited terminal), and notifies the mobile station F that it has been placed in retransmission control (retransmission-permitted terminal).³

It is respectfully submitted that Kumar does not teach “reducing correlation between reception errors occurring at the originally designated retransmission-permitted terminal and reception errors occurring at the newly changed retransmission-permitted terminal by the changing of the one of the originally designated radio terminals to the retransmission-inhibited terminal and the changing of the another of the radio terminals to the retransmission-permitted terminal” as in the amended Claim 1.

Because Kumar does not teach the above-described features, it is respectfully submitted that Kumar does not cure the deficiencies of Marturano et al. Therefore, no matter how Kumar and Marturano et al. are combined, the combination does not teach or suggest all of the elements of amended Claim 1. Although of different statutory class, and/or scope, Claims 2-9, 11-13 and 15-19 are believed to also patentably define over the asserted prior art.

³ See specification at page 21, lines 1-12.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-9, 11-13 and 15-19, as amended, patentably defines over the asserted prior art. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of this application is therefore requested.

Respectfully submitted,

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